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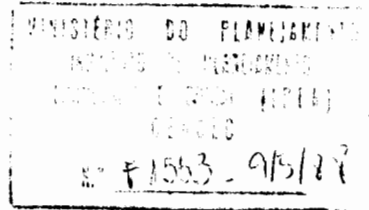
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FOREIGN DIRECT INVESTMENT IN BRAZIL:  
ITS ROLE, REGULATION AND PERFORMANCE

Helson C. Braga \*

1 - INTRODUCTION

The present study deals with the impact of foreign direct investment in the Brazilian economy.<sup>1</sup> Broadly defined, foreign direct investment is the establishment or purchase by residents of one country of a substantial ownership and management share of a business or real property in another country.

Most foreign direct investments are made by multinational companies whose head offices are located abroad. Some investments in foreign countries occur in order to provide inputs to the parent company. Other investments are designed to serve local foreign markets as an alternative for exports from the home country. Since World War II, foreign direct investments have increased rapidly as firms have sought to increase growth through multinational operations.

The operation of multinational companies produces distinct impacts (both positive and negative) in their home countries and in the recipient countries. This paper does not attempt a comprehensive study of these cost-benefit issues, which are exhaustively dealt with in literature.<sup>2</sup>

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<sup>1</sup>Accordingly other forms of foreign investment such as portfolio investment and commercial bank lending are excluded.

<sup>2</sup>See, for instance, United Nations (1974) and Lall & Streeten (1977).

More specifically, our intention here is, first, to trace the evolution of the role and nature of foreign investment in the various stages of Brazilian industrialization, emphasizing the most recent (Section 2). Secondly, we present, in a methodical way, the most recent data concerning foreign investment in Brazil, specially those from the United States (Section 3).

Section 4 presents a summary of the treatment given to foreign capital, with emphasis on the taxation aspect.

Section 5 assesses the multinational companies' performance compared with that of local companies of similar size, operating in the same industry. It uses a microeconomic approach to estimate the contribution of foreign investment to the attainment of some more general objectives of economic policy, such as job creation, exports, etc.

Finally, Section 6 summarizes the main points covered in the paper and presents a prospective analysis of the role of foreign investment in Brazil.

## 2 - THE ROLE OF FOREIGN DIRECT INVESTMENT IN THE BRAZILIAN ECONOMY

Foreign investment has assumed distinctive characteristics and played different roles in the recent history of the Brazilian economy. These changes have been connected not only with political and economic changes in Brazil and abroad but also with peculiarities of specific sectors.

In this section, these topics will be examined briefly, for each of the different periods in which these change occurred.

### 2.1 - Before 1930

Before the First World War, foreign investment was mainly British and was concentrated in railways, public utilities,

and agriculture [Castro (1979)]. Foreign capital in the industrialization boom which took place in the late 19th century and the beginning of the 20th (especially in the food and textile industries) was minimal. It must be emphasized however that almost half the main "Brazilian" economic groups that appeared in this phase were owned by immigrants [Queiroz (1965), p. 57].

Brazilian industrialization received the first important stimulus with the outbreak of the First World War, when a foreign supply was cut off. Almost six thousand firms were created during the conflict, with output value rising more than 200% [Baer (1966), p. 17].

By the end of the war, the industrial structure had gone through important changes in the sectoral distribution of output as well as in capital ownership. These changes occurred because foreign investments in manufacturing were made more regularly and because foreign and Brazilian investment were no longer directed towards textiles and food, but rather to chemicals, metallurgical products, mechanical products, etc. [Evans (1982), pp. 103-104]. Nevertheless, the 1920 industrial census showed that the textile (28.6%) and food industries (22.2%) were still responsible for half the value added of the industrial sector. This combined participation decreased to 45.6% and 39.7%, respectively in the 1940 and 1950 censuses [Baer (1966), p. 18].

In the twenties, many of the firms set up during the war were suffocated by the resumption of imports. Concentrating on the defense of coffee production, the government did not adopt a policy aimed at the protection of the initial industrial basis that had been formed. It was at that time, however, that some American firms began car and truck assembly and record and gramophone manufacture.

The first tentative estimate of the distribution of foreign investment in Brazil, as per country of origin, was

made by Wythe (1945) and refers to the year 1930: Great Britain accounted for 47%, the United States for 17%, France 8%, Canada 8%, Argentina 4%, and other European countries the remaining 16%.

## 2.2 - From 1930 to 1945

The depression of the thirties and the policies implemented by the Government at that time increased considerably the stimulus to Brazilian industrialization. The value of exports dropped from US\$ 445.9 million, in 1929, to US\$ 180.6 million, in 1932, drastically reducing Brazilian import capacity. This constraint, together with the income supporting policy for the coffee sector - which implied maintaining the level of aggregate demand -, represented a powerful incentive to raising production in the industries that competed with imports. As a result, industrial production, which had decreased for three consecutive years by 1933 had already recovered the 1929 level, and rose another 60% by the end of the decade [Baer (1966), pp. 21-26].

The Second World War brought about the decisive impulse to the consolidation of the industrialization process. The lack of available products in the countries involved in the conflict and the difficulties of transportation by sea practically eliminated the foreign competition faced by local industry.

From 1930 to 1945, foreign capital played a secondary role in the industrialization efforts [Newfarmer & Mueller (1975), p. 96]. U.S. investments in particular remained fairly stable throughout the period. Between 1929 and 1943, U.S. foreign investment in Canada and Western Europe rose from 26.7% to 30.2% and from 18.0% to 26.1%, of total U.S. foreign investment, respectively, while the Latin American share dropped from 46.7% to 35.6% [Doellinger (1977), p. 250].<sup>3</sup>

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<sup>3</sup> Doellinger suggested that this decrease in Latin American "attractiveness" had a lot to do with the politico-institutional alteration that occurred in the region, including Brazil.

## 2.3 - From 1946 to 1961

Between 1946 and 1955, the stock of U.S. direct investment increased significantly from US\$ 323 million to US\$ 1,115 million.<sup>4</sup> Precisely during the last year of the period, 1955, capital invested in the manufacturing sector reached half the total value of investments (it was 39% in 1946). It is interesting to note that this expansion occurred despite the experiments with exchange and profit remittances controls that characterized this period.<sup>5</sup>

The period which goes from 1955 to 1961 was extremely favourable to the inflow of foreign capital. In the first place, the 1955 SUMOC Instruction nº 113 allowed foreign companies to import capital goods without exchange coverage thus setting the initial landmark of a policy clearly receptive to foreign capital in Brazil. In the second place, protection of the domestic market, which had been provided by exchange restrictions since the previous phase, started to be ensured also by ad valorem tariffs.<sup>6</sup> Simultaneously, import policies were simplified (the five import categories were reduced to two) but products supplied by domestic industry could only be imported under the "special category" label, at an exchange cost higher than that of the "general category" [Baer (1966), pp. 56-58].

The Brazilian authorities appeared to have chosen conscious promotion of industrialization as an economic development strategy, in which foreign investments would play an

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<sup>4</sup>A systematic record of foreign capital stock in Brazil was only issued in the early seventies [OECD (1972)]. Before that, the only available information referred to U.S. investments, published in the Survey of Current Business.

<sup>5</sup>See Baer (1966), pp. 46-56.

<sup>6</sup>The former specific tariffs had completely lost their effectiveness, owing to inflation.

important role specially in the most modern manufacturing industries.<sup>7</sup>

Between 1955 and 1962, the investments made in the framework of SUMOC Instruction nº 113 reached US\$ 511.2 million (more than half of it directed to the automotive industry), the biggest share coming from the United States and West Germany [Gordon & Grommers (1962), p. 71]. Morley & Smith (1971, pp. 123, 126-149) estimated that from 1949 to 1962, 33.5% of total industrial output growth and 42% of total import substitution was attributable to foreign companies.

Of particular note was the presence of foreign companies, which in the second half of the fifties were accompanied by a vigorous expansion of state investments in the economic infrastructure, in which the energy, transport, iron and steel and petroleum refining sectors stand out. Such investments were part of the Target Plan for the period 1957-1960, which, according to one statement [Lessa (1981), p. 27], was the "most deliberate decision in favor of industrialization in the country's economic history" (author's translation).

As a result, Brazilian industrial output increased 9.6% yearly in the period 1947-1961 (12.7% in the subperiod 1956-1960, the period of the Kubitschek Government), while the national product expanded by 5.8% [Furtado (1965), p. 84].

#### 2.4 - From 1961 to 1965

The dynamism which had characterized the Brazilian economy in the previous phase (especially in the second half of the decade), as a result of an expansive macroeconomic policy, associated with a massive inflow of foreign investments, started

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<sup>7</sup>The exchange and trade policies were supplemented with loose credit and the expansion of public expenditure, which kept the aggregate demand at a constant high level.



to decrease in the early sixties. The economy's growth rate, which had reached 7.7% in 1961, dropped successively to 5.5% and 2.1% in the subsequent years. At the same time, the inflationary process gained a momentum: 37% in 1961, 61% in 1962 and 73% in 1963. The growth model based on import-substitution industrialization gave clear signs of exhaustion.

As a consequence of the economic and political problems and severe limitation on profit remittances imposed by the Goulart Government, the inflow of foreign investments in 1962 was only US\$ 9 million, compared to an average of US\$ 110 million in the four previous years. Similarly, U. S. government official loans dropped to US\$ 140 million (1962-1963 average) from US\$ 190 million (1950-1961 average), due to a leftist tendency of Brazilian foreign policy.<sup>8</sup>

The new administrators who emerged from the 1964 military coup radically changed the economic policy in order to face the crisis. Orthodox measures to control the money supply, public expenditure and wages were taken in order to restore domestic balance. To curb the balance of payments deficit, the cruzeiro was heavily devalued and restrictions on profit remittances were eliminated. The ensuing recession lasted until 1967 (the average per-capita income grew 0.7% in the period 1964-1967, having been negative in 1965) and inflation was reduced to 40%.

On the other hand, foreign direct investment rose from US\$ 22 million (1962-1964 average) to US\$ 73 million (1965-1967 average). In the two years following the military coup, moreover average official borrowings doubled (US\$ 289 million) compared to the average of the two previous years.

Considering the extent to which it was used in this phase as the main form of foreign investment in Brazil, it is

<sup>8</sup>See Baer & Kerstenetzky (1972), p. 111.

worth while analysing the take-over of domestic companies. Obviously, this was not a recent phenomenon in the history of Brazilian industrialization. During the first phase of this process, several foreign groups, among the biggest operating in Brazil, entered the country through the purchase of national enterprises [Queiroz (1972), p. 170]. In subsequent industrialization stages in which foreign capital was directed mainly towards the sectors where Brazilian capital could not face competition, the expansion of foreign investment did not imply the removal of Brazilian groups. Of course, there were exceptions, as in the case of the glass industry, which came to be completely dominated by foreign companies [Evans (1982), pp. 104-105].

The economic recession of the sixties and, above all, the credit squeeze included in the 1964-67 stabilization program made national companies extremely weak, thus greatly facilitating their take-over by foreign companies [Ratner (1972), p. 165].<sup>9</sup> The problem of foreign take-overs became so serious that it led to the setting up of a parliamentary committee of inquiry in order to look into the matter. The Committee discovered [Medina (1970), p. 130]<sup>10</sup> that there was a "fast foreign take-over process going on in Brazil, implying not only the purchase of national companies by foreign ones, but also the control of important sectors of the Brazilian economy by foreign capital" (author's translation).

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<sup>9</sup>From 1965 on, foreign companies could receive from their head offices plentiful and cheap resources for their working capital, at a time when the Brazilian companies were facing a credit squeeze and high interest rates [Doellinger et alii (1974), pp. 54-47].

<sup>10</sup>The Committee found out that between 1964 and 1968 foreign capital took over the control of 74 Brazilian companies, including a commercial bank and 17 investment banks out of the 27 existing banks. It is obvious that the Committee's conclusions did not influence the government's behaviour, nor was the foreign take-over process interrupted [Bandeira (1975), pp. 104-113].

## 2.5 - From 1968 to 1973

The exhaustion of the model of growth based on import-substitution made people-think that it had been brought about by the fact that exports had been neglected. It seemed clear that the country should manage to expand its exports substantially or else its capacity to grow would be permanently blocked by its restricted import capacity [Simonsen (1969), cap. 6]. In addition, competition in foreign markets would force the companies to reach and maintain high standards of product efficiency and quality, with positive effects also on the domestic market.

In literature, several authors have defended outward-looking trade policies replacing the inward-looking ones, the most frequent consequences of which were the creation of an inefficient industrial sector, which operated with idle capacity, created few jobs, little exchange savings and showed limited possibilities of productivity growth.<sup>11</sup>

To implement the new strategy of export promotion the crawling peg system was adopted and fiscal and credit incentives were made available to exporters of manufactures.<sup>12</sup> Favoured by expanding foreign trade and by low utilization of industrial capacity (83%, in 1968), exports of manufactures increased at the high yearly rate of 38% in the period. With an average growth rate of 27%, total exports increased their share in the Gross Domestic Product (which grew at the average rate of 11.5%) from 5.2% to 7.6% between 1968 and 1973. [Peñalver et alii (1983), pp. 6 and 7].

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<sup>11</sup> See, for instance, Keasing (1967), Hirschmann (1968), Baer (1972) and Helleiner (1972).

<sup>12</sup> A description of these mechanisms can be found in Doellinger et alii (1974), cap. 2.

Around 1972 it seemed obvious that the continuing expansion of exports would depend on growth of productive capacity, for capacity utilization had increased to 90%. For this purpose, the Befiex Program was created. This program increased fiscal incentives (import duty exemption or reduction, and tax exemption or reduction for manufactured products provided that imports did not exceed one-third of the company's average exports) and exempted imports of capital goods from the requirement of the non-existence of similar Brazilian products. The basic prerequisite for these benefits was the company's commitment to reach a certain minimum amount of exports (decided case by case) during a short-term period (usually 10 years).<sup>13</sup>

Although the benefit could be extended to Brazilian as well as foreign companies, the latter were the main targets of the Program for two reasons. In the first place, it was due to their greater ability to shoulder long-term commitments as a consequence of greater familiarity with foreign markets and of being able to determine trade flows by means of intra-company transactions. Secondly, as the Program allowed the import of second-hand capital goods, the foreign companies could also take advantage of the intra-company transfers in order to reduce depreciation and obsolescence costs.

By the end of 1980, 41 out of a hundred companies that had their export programs approved were foreign. These foreign-owned companies accounted for 61.8% of Befiex investments (US\$ 7,026 million), 58.2% of export commitments (US\$ 25,180 million), 47.1% of trade surplus (US\$ 4,997 million) and 61% of direct jobs created (45,769). In 1980, the Befiex Management Committee estimated that the Program's share of total exports

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<sup>13</sup> Almost simultaneously, another decree-law exempted the importation of whole industrial complexes from tariff duty and the manufactured products tax, since their output was "essentially" meant for exportation. This incentive, however, did not arouse the expected interest.

was of 22% and its contribution to export growth (in the year) was 31%.

## 2.6 - The post-1974 Period

In the opinion of most analysts, the first oil-shock in 1973-1974 marked the end of the "Brazilian miracle", as the 1968-1973 period is known, during which the Gross Domestic Product expanded at an annual rate of as much as 11.5%. The value of oil imports increased more than six-fold between 1972-1974, when it reached US\$ 2,960 million. However, the Brazilian government - either because it underestimated the real extent of the crisis or simply because it decided not to bear the political burden of frustrating people's expectation of growth continuity - failed to adjust to the new conditions, choosing instead to maintain real incomes in the face of a drastic decline in the terms of trade.

To face the pressure on the balance of payments that this decision would inevitably bring about, the government decided to raise the tariff and non-tariff barriers for imports, resorted to foreign debt and conceived an ambitious substitution program of basic input and capital goods imports. Thus, in the 1974-1980 period, the domestic product grew at an yearly average rate of 7.1%, while the industrial sector and the manufacturing industry grew 7.7% and 6.8%, respectively.

During this phase, a new type of foreign investment grew, in which multinationals supplied technology and had a minority holding in joint undertakings with private and state national companies. This tripartite association, which was formerly used in establishing the petrochemical industry, was regarded by the II National Development Plan (1975-1979) as the ideal strategy to make expensive and technologically advanced investments work, avoiding foreign take-overs and excessive state expansion in the economy.

To strengthen the capital structure of Brazilian private companies in these undertakings, the National Bank for Social and Economic Development (BNDES) created three subsidiaries which, besides offering very favourable financing terms, had minority holdings in the capital of the national companies involved. By the end of 1979, the three BNDES subsidiaries had invested US\$ 1,150 million, which allowed them a 16% share in the stocks with voting privileges and 31% of the preferred (non-voting) stock of 35 aided companies. One-third of these resources were invested in capital goods industry projects and approximately half were directed to basic inputs and intermediate goods (cement, fertilizers, pulp and mining products).<sup>14</sup>

The best results of the tripartite model took place precisely in the pioneer industry of its application -, which fulfilled two basic conditions for its success. The first was the dominant position of PETROQUISA-a subsidiary of the monopolist state company (PETROBRÁS) for the production of the basic raw material -, through which the government implemented a firm strategy for the expansion of the industry. The second was the fact that this government's goal coincided with the interest of multinational companies from several countries (especially Japan) involved in the keen competition for petrochemical technology market. This made the Japanese adopt more flexible positions in the transfer of technology. Immediately afterwards, in order not to lose a share of the market (a typical attitude of oligopolistic competition), multinational companies from other countries decided to participate in the tripartite association [Guimarães et alii (1983), p. 65; Sorensen (1983), p. 52].

Another state company - Vale do Rio Doce, which mines ore and exports minerals - was able to take more advantage than PETROQUISA of its associations with multinational companies. The main reasons were: the raw materials it controls are Brazilian (in opposition to PETROBRÁS/PETROQUISA, which depends heavily

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<sup>14</sup>See Villela e Baer (1980), pp.95-107.

on external supply) and the technology for extracting and working ores in known (what eliminates one of the main power sources of the multinational companies).<sup>15</sup> Vale do Rio Doce's basic motivation in these partnerships, usually with its foreign clients, is to ensure a market for its exports. It is worth noting that Vale do Rio Doce did not adopt the tripartite model in its joint undertakings. It not only stopped including Brazilian partners in its projects, but also competes with some of them in specific sectors.

The pharmaceutical industry is a third example-when the state does not have any power over multinational companies and Brazilian private companies are not strong enough financially - to characterize the success/failure of the tripartite model. In this case, not only are the important raw materials imported, but they are also supplied by the multinational companies themselves. Moreover, these companies hold tight control on the new technology. Finally, there were no Brazilian companies - private or state-owned - as large as the multinationals.

The attempt to create a state company (the Drug Agency) in 1971, to make use of the productive capacity of some twenty public laboratories did not last five years: in the middle of 1975 the company was dismantled and divided into two parts distributed between different ministries.<sup>16</sup> In this sector the predominance of multinational companies is absolute. Objectively, they do not have any interest in associating with the remaining Brazilian companies.

The three examples given - PETROQUISA, Vale do Rio Doce and the Drug Agency - show that the feasibility of the tripartite model as a kind of enterprise organization depends on a few very restrictive conditions; it cannot be thought of

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<sup>15</sup>Evans (1985), p. 218.

<sup>16</sup>For details on the Drug Agency's history and the foreign take-over of the pharmaceutical industry, see Evans (1980, pp. 220-225).

as a general purpose strategy. In the first place, strong bargaining power is needed on the part of the state partner to face the multinational company, mainly based on the supply of essential raw materials. In the case of absence of this countervailing power and technology, the predominance of multinationals will be unavoidable.

The bringing (and not the selling) of technology as a way of participating (to a minority extent) depends, in its turn, on the gaps left open by the oligopolistic competition promoted by the most recent world producers in specific markets. Otherwise, the multinational companies will prefer to establish branches in which they have majority holdings or sell technology.

These examples suggest that participation of a Brazilian private partner depends on a certain balance between the other two partners. Whenever there is a clear predominance of one of the partners - state or foreign - a Brazilian private partner will not be invited to participate. As is happened in the petrochemical sector, the government must be determined to strengthen the financial capacity of the Brazilian entrepreneur if he is become an important ally.

It is not surprising, therefore, that the tripartite model was a success in the petrochemical industry, at least during its implantation phase. People went so far as to think that it was not only an all-purpose solution but also a stable one.

However, there are signs that this stability is threatened. First because there was an excessive atomization of single-product companies, which do not benefit from the large complexes which are typical of industry. Such atomization resulted, to a great extent, from the need to limit the size of investments in order to make possible the participation of the Brazilian private partners, in addition to the effort to strengthen their capital structure.



Secondly, some foreign partners have expressed an interest in withdrawing from the association. All of the investments (at the São Paulo, Bahia and Rio Grande do Sul petrochemical poles) were intended for an expanding market, which at present absorbs only 70% of its output, the remaining being exported.

As a result, it is evident that there is widespread financial weakness in the Brazilian private companies, especially among those belonging to the Rio Grande do Sul petrochemical pole. The suggestions most frequently presented to get around this problem are mergers of companies and subsidization through the supply of raw-materials (naphtha) at preferential prices, as happens, for instance, in Japan.

### 3 - FOREIGN DIRECT INVESTMENT IN BRAZIL: A QUANTITATIVE VIEW

The objective of this Section is to present, in a systematic way, the most recent data concerning foreign capital in Brazil.

Table 1 shows the stock of foreign capital by country of origin, in selected years. In late 1983, the stock of foreign capital registered with the Banco Central reached US\$ 22.3 billion, almost eight-fold the 1971 total.<sup>17</sup>

In the period 1965-1980 Brazil absorbed a growing share of the world flow of foreign direct investment: in the subperiod 1965-1969, the percentage was 2.6%; during 1970-1974, 4%; and during 1975-1979, 7.1%. In the two-year period 1980-1981, it dropped to 4.7%.<sup>18</sup>

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<sup>17</sup>It should be stressed that those Banco Central data are largely underestimated since the registration with the Banco Central is in any event not required, a lot of direct investment enters the country as debt, and the figures are book values, with all the problems that entail in a inflationary environment (see Section 4).

<sup>18</sup>U.S. Dept. of Commerce (1984), p. 47. The share received by the United States in the aforementioned subperiods was 11%, 16.2%, 23.4% and 37.5%, respectively.

TABLE 1  
FOREIGN DIRECT INVESTMENTS (AND REINVESTMENTS) IN BRAZIL,  
BY COUNTRY OF ORIGIN, IN SELECTED YEARS

Country of Origin	1930 <sup>(a)</sup>		1967 <sup>(b)</sup>		1975 <sup>(c)</sup>		1980 <sup>(c)</sup>		1983 <sup>(c)</sup>	
	US\$ Million	%	US\$ Million	%	US\$ Million	%	US\$ Million	%	US\$ Million	%
United States	210	17.2	1 328	35.4	2 295	31.4	5 004	28.6	7 198	32.3
United Kingdom	575	46.6	178	4.8	430	5.9	1 111	6.4	1 133	5.1
West Germany	-	-	517	13.9	871	11.9	2 448	14.0	2 848	12.8
Switzerland	-	-	140	3.8	736	10.1	1 768	10.1	1 938	8.7
Japan	-	-	212	5.7	841	11.5	1 725	9.9	2 037	9.1
France	198	8.1	263	7.1	300	4.1	702	4.0	705	3.2
Canada	100	8.0	625	16.8	411	5.6	641	3.7	1 016	4.6
Others	251*	20.1	465	12.5	1 420	19.5	4 073	23.3	5 427	24.2
TOTAL	1 235	100.0	3 728	100.0	7 304	100.0	17 480	100.0	22 302	100.0

Sources: (a) Mythe (1945). Portfolio investment included.

(b) OECD (1972). Portfolio investment included.

(c) Central Bank of Brazil. Position on December 31<sup>st</sup>.

\* Refer to Other European Countries (16,2%) and Argentina (4,0%).

Except for 1930, when British capital predominated, in the other years selected, the largest share of capital stock belonged to U.S. residents. After 1967, this share exceeded 30% except in 1980, when it dropped to 28.6%.

In 1983, there was a significant West German (12.8%), Japanese (9.1%), and Swiss (8.7%) share of investment. Particularly outstanding is the share of Japanese investment, which doubled between 1971 and 1983.

Table 2 shows values and percentage distribution of foreign capital as per receiving sectors in selected years. As can be seen, approximately three-quarters of this capital was invested in the manufacturing sector. Moreover, it can be seen that the service sector share grew considerably during this period, reaching a little over 20% in 1983.

In 1983, the last year shown, the industries in which these investments were most concentrated were chemicals (13.6%) and transportation equipment (13.3%). In the service sector, investment in holding companies accounted for 10.8% of the grand total.

Table 3 partially combines the information from Tables 1 and 2, for 1983. The country among the selected countries to invest most in manufacturing was West Germany (89.4%), followed by Canada (82.9%) and the United States (74.7%). Services are more important for the French investors (42.5%) and British investors (38.4%). Some industries account for a large share of some countries' investments, such as motor vehicle and parts for West Germany (35.7%) and Switzerland (20.6%) and chemicals for Canada (33.6%).

Table 4 shows the revenue outflow (remitted and reinvested) connected with the foreign capital stock, in absolute values and as a proportion of the invested capital. Although the last two years of the series show the highest remittances (average above US\$ 800 million), in relative terms, these transfers

TABLE 2

## FOREIGN EQUITY CAPITAL IN BRAZIL, BY RECEIVING SECTOR (\*)

Receiving Sector	1971		1975		1980		1983	
	US\$ Million	%	US\$ Million	%	US\$ Million	%	US\$ Million	%
Mining	26.1	0.9	154.4	2.1	487.4	2.8	652.1	2.9
Manufacturing Sector	2 073.1	81.8	5 572.2	76.3	13 005.4	74.4	16 384.6	73.5
Nonmetallic Minerals	61.6	2.1	189.8	2.6	321.3	1.8	397.4	1.8
Metallurgy	213.6	7.3	565.5	7.7	1 388.8	7.9	1 652.0	7.4
Machinery	123.7	4.2	510.9	7.0	1 704.6	9.8	2 111.7	9.5
Electric and Com. Equip.	261.6	9.0	620.0	8.5	1 394.3	8.0	1 643.4	7.4
Transportation Equipment	405.5	13.9	988.7	13.5	2 344.4	13.4	2 967.2	13.3
(Motor Vehicles)	(309.8)	(10.7)	(740.5)	(10.1)	(1 743.9)	(10.0)	(2 344.3)	(10.5)
(Motor Vehicle Parts)	(76.6)	(2.6)	(203.2)	(2.8)	(492.6)	(2.8)	(499.6)	(2.3)
Paper and Pulp	67.9	2.3	150.9	2.1	374.0	2.1	453.4	2.0
Rubber	103.4	3.6	170.6	2.3	384.9	2.2	543.3	2.4
Chemicals	624.5	21.5	1 076.2	14.7	2 435.8	13.9	3 028.5	13.6
(Basic Chemicals)	(352.3)	(12.1)	(728.9)	(10.0)	(1 813.3)	(10.4)	(2 236.9)	(10.1)
(Petroleum Derivatives)	(197.3)	(6.8)	(236.2)	(3.2)	(393.2)	(2.2)	(518.4)	(2.3)
Pharmaceutical Products	113.4	3.9	292.2	4.0	722.4	4.1	936.2	4.2
Textiles	69.7	2.4	229.8	3.1	369.4	2.1	373.4	1.7
Food Processing	135.4	4.7	317.8	4.4	765.3	4.4	895.7	4.0
Tobacco	112.1	3.9	196.6	2.7	137.0	0.8	243.7	1.1
Other	87.3	3.0	263.3	3.6	663.2	3.7	2 924.5	13.1
Public Utilities	157.4	5.4	218.8	3.0	44.2	0.3	45.3	0.2
Agriculture	20.7	0.7	26.4	0.4	164.4	0.9	134.9	0.6
Services	276.3	9.5	1 190.5	16.3	3 425.5	19.6	4 607.5	20.7
Finance and Insurance	89.8	3.1	288.3	3.9	658.8	3.8	887.7	3.9
Holding Companies	77.0	2.6	463.6	6.3	1 797.6	10.3	2 399.1	10.8
Other	109.5	3.8	438.6	6.0	969.1	5.5	1 482.8	6.7
Other	47.3	1.4	141.0	1.9	353.2	2.0	409.7	1.8
TOTAL	2 911.5	100.0	7 303.6	100.0	17 480.0	100.0	22 302.1	100.0

Source: Boletim do Banco Central, several issues.

(\*) Currencies of the different countries of origin were converted into dollars according to the exchange rate of December 31<sup>st</sup> of the corresponding year.



TABLE 3  
FOREIGN DIRECT INVESTMENTS (AND REINVESTMENTS) IN BRAZIL,  
BY COUNTRY OF ORIGIN AND RECEIVING SECTOR - 1983\*

(%)

RECEIVING SECTOR	USA	WEST GERMANY	SWITZERLAND	JAPAN	UNITED KINGDOM	FRANCE	CANADA	TOTAL
<u>Mining</u>	4.7	1.9	0.1	1.8	2.5	0.5	2.8	2.9
<u>Manufacturing</u>	74.7	89.4	80.3	73.6	56.7	53.6	82.9	73.5
Metallurgy	4.5	9.8	1.4	19.0	2.6	3.0	12.4	7.4
Machinery	11.8	16.1	5.2	8.3	3.4	5.1	16.0	9.5
Electric and Com.Equip.	9.0	6.2	9.1	12.5	1.1	2.7	8.0	7.4
Motor vehicle and parts	7.8	35.7	20.6	4.0	0.7	1.0	0	12.8
Chemicals(Basic)	13.0	7.3	2.2	1.7	10.7	15.3	33.6	10.1
Pharmaceutical Products	5.0	4.2	3.6	0.1	1.4	3.9	12.0	4.2
Textiles	1.0	0.1	2.3	7.7	4.1	0.4	0	1.7
Food Processing	4.7	0.5	14.4	1.9	0.3	2.6	0.01	4.5
<u>Services</u>	18.7	8.0	17.2	18.5	38.4	42.5	11.3	20.7
Holding Companies	9.4	2.7	12.9	3.2	26.6	20.4	10.2	10.8
<u>Other</u>	1.0	0.4	1.3	4.3	1.8	2.0	3.0	1.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Boletim do Banco Central, Separata, May, 1984.

\*Currencies of the different countries were converted into dollars according to the exchange rate of December 31st, 1983.

TABLE 4  
OUTFLOW OF CAPITAL AND SERVICES - 1970/1983

US\$ MILLION

YEAR	REMITTED PROFITS AND DIVIDENDS	PROFITS AS A PERCENTAGE OF FOREIGN EQUITY CAPITAL	PROFITS PLUS REINVESTMENT	INTEREST
1970	119	5.5	141	284
1971	119	5.1	514	344
1972	161	5.5	362	489
1973	199	5.8	711	840
1974	250	4.6	...	1 370
1975	237	5.2	...	1 828
1976	383	5.0	...	2 091
1977	458	4.6	...	2 462
1978	561	5.0	1 536	3 342
1979	740	5.4	1 461	5 348
1980	544	3.1	955	7 457
1981	587	3.0	1 328	10 305
1982	863	4.1	2 419	12 551
1983	762	3.4	1 457	10 263

Source: Boletim do Banco Central, several issues.

decreased after 1980: the percentage average in relation to the invested capital remained at 3.4%, well below the historical patterns.

Table 4 further presents the interest paid abroad so as to give an idea of the magnitude of these two foreign capital revenue flows. Although very irregular, the ratio between these two values systematically dropped from 1978 on, when profits plus reinvestments represented 45% of interest payments. In the following years, this ratio successively dropped finally reaching 14%, in 1983.

Finally, Table 5 indicates the position and revenues from U.S. investments in Brazil, as well as the proportion of these values in relation to total United States investment abroad.

In 1982, U.S. investments in Brazil reached US\$ 9,031 million (4.1% of the total), which generated US\$ 871 million in revenues (3.8% of the total).

In the period 1950-1966, U.S. investments in Brazil increased at the yearly average rate of 2%, which was among the lowest ones recorded among the main capital-receiving countries. In the period 1966-1982, however, the rate increased to 15.6%, which was the highest record, only equal to the Dutch.

In the period 1977-1982, U.S. investments in Brazil represented, on average, slightly less than 4% of the total invested abroad. However, they were not the most profitable ones: the revenues produced by these investments accounted for only 2.3% of the total amount received.

#### 4. - TREATMENT OF FOREIGN DIRECT INVESTMENT IN BRAZIL<sup>19</sup>

Two basic legal texts deal with the treatment of

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<sup>19</sup>The analysis in this Section concentrates on the principal issues related with the treatment of foreign investment in Brazil. A more detailed analysis may be found in Rosenn's excellent article (1983).

TABLE 5  
U.S. DIRECT INVESTMENT POSITION AND INCOME RECEIPTS IN  
BRAZIL - 1950/82.

YEAR	U.S. DIRECT INVESTMENT POSITION		INCOME RECEIPTS ON U.S. INVESTMENT	
	US\$ Million	%	US\$ Million	%
1950	644	5.5	97	5.5
1957	835	3.3	74	2.0
1966	882	1.7	108	2.0
1977	5 695	4.0	589	3.0
1978	6 961	4.3	910	3.6
1979	7 298	3.9	247	0.6
1980	7 704	3.6	499	1.3
1981	8 247	3.6	499	1.5
1982	9 031	4.1	871	3.8

Source: U.S. Department of Commerce (1984).

OBS.: The percentages are related with the total U.S. investments abroad.



foreign capital in Brazil: Law no. 4390 of 9.11.64 which provides for profit remittance abroad and the Normative Act no. 15 of 9.11.75 issued by the National Institute for Industrial Property (INPI) concerning technology transfer. In addition to examining these laws this section will show that foreign capital is given a discriminatory treatment pursuant to many other legal texts and under some unwritten rules adopted by government agencies.

#### 4.1 - Registration of Foreign Direct Investment

Foreign capital is generally free to invest directly in any kind of legitimate venture in Brazil. It is only necessary to follow the same procedures required to set up a domestic corporation.<sup>20</sup> There are many exceptions to this rule, however. First of all, like most of the countries in the world, the Brazilian Government keeps to itself some sectors considered as sensitive. Oil exploration, prospection and drilling,<sup>21</sup> and public utilities such as electricity, telecommunications, railways and ports are examples of such sectors.

Secondly, legislation bars foreigners from communications media, coastal shipping companies, domestic airlines and highway transportation companies. Although there is no law preventing foreign banks from opening branches in Brazil, the Central Bank - which issues permits - not only has denied registration to foreign banks but also has prevented foreign banks already operating in Brazil from increasing the number of their branches. More recently (1980) a system of market reserve has been imposed on data processing and related fields. The Special

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<sup>20</sup> Law no. 4131 Art. 2 of Sept. 3, 1962, provides: "Identical juridical treatment to national capital under conditions of equality shall be dispensed to foreign capital invested in the country, prohibiting any discrimination not provided for in this law".

<sup>21</sup> Law no. 2004 of Oct. 3, 1952. Since 1976, the Government has allowed foreign oil companies to prospect for oil pursuant to risk contracts requiring the foreign oil companies to set up Brazilian branches or subsidiaries.

Secretariat for Computer-Related Activities (SEI), set up to manage the system, has reserved the mini and micro-computer industries, as well as testing and measuring instrumentation systems for Brazilian firms.

Lastly, until the mid-70s the Brazilian legislation did not provide for prior approval in the acquisition of Brazilian firms by foreign firms. As we have seen in Section 2, this was the procedure of choice for firms settling in the Brazilian market.

The new 1976 Corporation Law, however included a provision to the effect that the take-over of any company quoted in the stock market depends on the previous approval of the Securities Commission.<sup>22</sup>

Except for these cases, where there are restrictions to the inflow of foreign capital, foreign-owned firms incorporated in Brazil are free to do what they want with the returns on their investment. To make a legal remittance of profits abroad or to repatriate capital, however they need a registration with the Central Bank (this aspect will be dealt with in item 4.2). Despite this requirement, however, it is reckoned that a substantial amount of foreign investment in Brazil has never been registered with the Central Bank.

Among the possible reasons for this are:

a) the impossibility of proving the foreign origin (total or partial) of investments made before 1962 when the registration was effectively enforced;

b) the acquisition of assets abroad in larger amounts than those registered;

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<sup>22</sup>On at least one occasion (Phillips-Consul) the Brazilian Government blocked a foreign take-over of a domestic firm.

c) INPI's refusal to register technology or industrial property rights; and

d) the conversion of foreign currency at black market rates more profitable than the official ones.

#### 4.2 - The Profit Remittance Law

The first attempt to regulate the flow of foreign capital and earnings in Brazil took place in 1946, through Decree-Law no. 9025. The amount of capital that could be repatriated in any year was limited to 20 per cent and profit and dividend remittance was restricted to 8 per cent of the foreign capital duly registered with the Exchange Division of Banco do Brasil. As was expected, these regulations provoked strong reactions from the foreign investment community, especially because they did not allow the addition of unremitted earnings to registered capital in order to build up the remittance base.

This regulation was short-lived: "Due to the favorable conditions on the exchange market", it was revoked six months later and there was no change until 1962,<sup>23</sup> when Brazil enacted a very restrictive Profit Remittance Law.<sup>24</sup>

This statute limited capital repatriation to 20 per cent of registered investment and yearly profit remittance to 10 per cent (Remittances above this amount were considered as capital repatriation). In addition, its regulatory decree<sup>25</sup> banned the addition of reinvested earnings to registered capital in order to increase the remittance base.

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<sup>23</sup>From 1953 on, however, as a consequence of the aggravation of balance-of-payments disequilibrium, only profit remittances up to 10% of registered capital could be made at the official exchange rate. Anything above that had to be purchased at the free (higher) market exchange rate (Law no. 1807 of Jan. 7, 1953).

<sup>24</sup>Law no. 1431 of Sept. 3, 1962.

<sup>25</sup>Decree no. 53451 of Jan. 20, 1964.

One of the first steps taken by the administration which took power after the military coup of April 1964 was to eliminate the restrictions on capital repatriation (since then, it has been totally free) and on profit remittance. As regards this latter aspect, the former prohibition was replaced by a supplementary progressive income tax, in addition to the 25% normally charged (15%, if there is a double-taxation agreement with the country from which the capital originates) over remittances made to non-resident individuals and corporations - whenever the average remitted over a three-year period surpasses 12% of registered investments and re-investments.<sup>26</sup>

#### 4.3 - Foreign Transfer of Technology

Until 1958, the technology and technical assistance license agreements with foreigners were not subject to any kind of restriction in Brazil. In spite of the frequent delay in granting patent or mark registration, the royalties could be freely remitted. In that year, however limits were set for royalty payment on patents and technical assistance (ranging from 1 to 5 per cent, depending on which group the patented product was placed) and trademarks (1 per cent of gross sales).<sup>27</sup>

These restrictions were later incorporated into the 1962 Profit Remittance Law as profit remittance limits. According to this law, if the foreign licensor controls the Brazilian licensee directly or indirectly, all royalty payments for patents and trademarks are both non-remittable and non-deductible for income-tax purposes. The payments for technical assistance can still be made, but they are considered as distributed dividends and must, therefore, be included in the 12% limit over the registered capital.

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<sup>26</sup>The marginal share of the supplementary tax is 40% when the percentage remittance is between 12 and 15%; 50% if it is between 15 and 25%; and 60% if the remittance is over 25% (Law no. 4390 of Sept 11, 1964).

<sup>27</sup>Law no. 3470 of Nov. 28, 1958.

Today, the most important regulation concerning the registration and approval of technology transfer agreements is the Industrial Property Code administered by the National Institute for Industrial Property (INPI),<sup>28</sup> a government agency set up in 1970.<sup>29</sup> Unless a technology transfer agreement has been registered with INPI, the Central Bank will not authorize remittance of royalties abroad nor will the Ministry of Finance allow tax deductions on the correspondent payments. The register with INPI is also necessary to ensure legal protection to the right of industrial property.

INPI will not approve technology agreements which impose restrictions on product manufacturing, marketing or export or on the import of intermediate inputs required for their manufacturing. Nor will INPI accept contracts requiring the licensee to use only the licensor's trademark.

#### 4.4 - An Evaluation of the Brazilian Regulatory Scheme

A set of often conflicting objectives can be identified in Brazil's regulatory scheme for foreign investment:

- a) balance of payments adjustment;
- b) prevention of foreign capital from taking advantage of domestic corporations, which are supposedly the weaker part;
- c) inducement to foreign industries to set up operations in Brazil; and
- d) stimulation of the development of domestic technology.

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<sup>28</sup> Normative Act no. 15 of Sept. 11, 1975, issued by INPI.

<sup>29</sup> INPI has broken down technology transfer into five categories: patent licenses, trade-mark licenses, know-how licenses, technical-industrial cooperation agreements and specialized technical service agreements. The Code of Industrial Property sets extremely detailed provisions about agreements involving each category.

The task of achieving these objectives simultaneously is extremely difficult and complex, and it is only natural that many of the compromise solutions adopted have frequently brought about dissatisfaction among the parties involved or have seemed to produce a negative net effect.

We are convinced, however that the positive aspects have made up for the negative ones. As an adequate treatment to this question is well beyond the scope of the present work, we do not intend here to put forward arguments to back this view.

What we intend to do instead is to identify possible distortions prevailing in the scheme which can be improved both from the legislative and the operational point-of-view in the institutions involved. We could consider the following aspects:

First, the Brazilian legislation encourages foreign investors to report their investments as debt instead of equity, unnecessarily aggravating Brazil's foreign debt problem. In fact, while the interest income<sup>10</sup> is only taxed (25%) when it is remitted to the foreign lender, the dividend income is double-taxed: through the regular corporate income tax (35%) and again in 25% over the remaining 65%, when remitted to the foreign investor. In addition, in the case of exchange control, Law no. 4131 provides for restrictions to profit and dividend remittance, but imposes no restriction at all over interest remittance. Finally, in view of the 12% limit imposed on the profit and dividend remittance, and of the fact that the interest income is determined by market conditions, the behavior of foreign interest rate may determine the convenience of registering an investment as a debt or as an equity: in 1980-1981, when the interest rate fluctuated between 18-20%, capital inflow in the form of loans was strongly stimulated; now, as the interest rate is about 8%, this tendency has been reversed.

It seems evident, therefore, that there should be a reversal - or at least an equalization - in the treatment given

to both kinds of investment. Among the possibilities to consider are: a reduction of the ratio of profit and dividend remittances to registered capital for supplementary tax application purposes; and to make the 12% limit more flexible. This might be set as equal to the LIBOR plus a margin to stimulate the conversion of debt into equity.

Second, the Profit Remittance Law does not provide for any indexation to make up for the devaluation of the currency in which the capital registration has been made. Although on a decline, inflation is a more or less generalized phenomenon in the major capital-providing countries. It would therefore be reasonable to allow this conversion so that earnings do not incur in supplementary tax liability as a mere consequence of nominal increases.

Third, the setting of a single ceiling for the percentage remittance over the invested capital presupposes implicitly that the gross earnings (as regards capital and risk intensity) of different activities do not show major discrepancies - which is not the case.

The more obvious examples are the service firms (where capital tends to be quite low in relation to their net earnings) and firms engaged in oil drilling and mineral exploration, where risks are fairly high. Some flexibility to take these discrepancies into account would be technically recommended.

A final recommendation is related to the institutional framework for control of foreign capital in Brazil. As it is difficult to rely on uniform regulations enforced by a single institution, efforts should concentrate on the following practical objectives: to promote better coordination between the different government agencies involved (INPI, CACEX, SEI, etc.) more stable rules of the game and fewer possibilities for arbitrary decisions.

5 - A COMPARISON BETWEEN THE PERFORMANCE OF MULTINATIONAL AND DOMESTIC COMPANIES

This Section presents a comparative analysis of the performance of multinational<sup>30</sup> and domestic companies, with reference to a pre-established set of criteria.

From a methodological viewpoint, the comparison is made through the matched pairs technique - a multinational and a domestic one -, controlling for the companies' size and the industry in which they operate.<sup>31</sup> This measure is necessary, since there is sufficient evidence that many of the recorded differences in the performance of the two kinds of companies have less to do with the origin of the capital than with the different scales of production and with the particular kinds of goods they produce.

The technique consists in estimating for each variable and each pair of firms (matched by volume of sales) the standardized difference, defined as the absolute difference expressed as a percentage of the average level for the two firms.<sup>32</sup>

Table 6 shows the average values of the variables chosen for the comparison, separately for the multinational companies and the domestic ones, as well as the respective stand-

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<sup>30</sup> A multinational company is treated here as one in which foreigners hold more than ten percent of the equity capital.

<sup>31</sup> This methodology was first employed in this aim by Fairchild (1972) and since then it has been used in several studies, including in Brazil [see Dantas (1977), Gonçalves (1983), and Wilmore (1984)].

<sup>32</sup> Algebraically, the standardized difference is  $(100) (M_i - D_i) / (M_i + D_i) (1/2)$  where  $M_i$  represents the value of a variable for the  $i^{\text{th}}$  multinational company and  $D_i$  the value for the domestic company matched to it. A positive  $i$  difference indicates that the value for the multinational company exceeds that registered by its domestic counterpart.



TABLE 6

COMPARATIVE PERFORMANCE OF MULTINATIONAL AND DOMESTIC COMPANIES - MEAN VALUE FOR  
301 COMPANIES UNLESS OTHERWISE INDICATED - 1978

VARIABLE	MULTINATIONAL COMPANY	DOMESTIC COMPANY	STANDARDIZED DIFFERENCE (percent)
<u>Size of Firm</u>			
Sales (million cruzeiros)	168.5	168.8	- 0.6 <sup>**</sup> (0.2)
Value-added (million cruzeiros)	102.5	96.4	6.2 <sup>**</sup> (2.3)
Number of employees	338.5	416.5	- 13.8 <sup>**</sup> (4.1)
Number of establishments	1.9	2.1	- 7.8 <sup>*</sup> (3.7)
<u>Vertical Integration</u>			
Value-added as a percentage of total output	58.3	55.1	5.9 <sup>**</sup> (2.2)
<u>Product Differentiation, Royalties</u>			
Advertising expenditures/domestic sales (percentage)	1.2	0.9	20.3 <sup>**</sup> (7.9)
Total royalty payments (thousand cruzeiros)	261.0	123.1	8.5 (5.7)
Percentage of firms paying royalties	14.2	10.6	...
Overseas royalty payments (thousand cruzeiros)	126.3	45.8	9.0 (3.7)
Percentage of firms paying royalties abroad	7.4	3.5	...
<u>Export Performance</u>			
Export of all firms (million cruzeiros)	14.0	8.0	61.6 8.2

(continue)

Table 6 (continued)

VARIABLE	MULTINATIONAL COMPANY	DOMESTIC COMPANY	STANDARDIZED DIFFERENCE (percent)
Percentage of firms that export	68.1	48.6	...
Export (million cruzeiros) when both firms export (n=117)	30.5	17.4	57.3 (11.8)
Export subsidies as % of export sales (n=117)	16.2	18.0	7.2 (10.8)
<u>Labor Productivity</u>			
Value-added per employee (thousand cruzeiros)	374.3	295.2	19.9** (3.8)
Value-added per production worker (thousand cruzeiros) (n=285)	834.6	491.1	26.4 (4.6)
<u>Skill Intensity</u>			
Non-production workers as a percentage of total employment (n=285)	35.4	28.7	20.3 (4.5)
Annual wage per employee (thousand cruzeiros)	91.6	65.4	30.5** 3.1
Annual wage per non-production employee (thousand cruzeiros) (n=285)	133.1	106.1	26.6** (3.4)
Annual wage per production worker (thousand cruzeiros) (n=285)	64.2	51.8	18.9 3.1
<u>Capital Intensity</u>			
Nonwage value-added per employee (thousand cruzeiros)	252.2	206.5	12.8** (4.7)

(continued)

Table 6 (continued)

VARIABLE	MULTINATIONAL COMPANY	DOMESTIC COMPANY	STANDARDIZED DIFFERENCE (percent)
Nonwage value-added per production worker (thousand cruzeiros) (n=285)	545.3	342.8	20.0 (5.3)
Electricity consumption per production worker (thousand cruzeiros) (n=263)	9.3	7.1	23.9 (5.6)

Source: Wilmore (1984).

Note: The numbers in brackets are the standard errors of the mean of the standardized difference.

\* Indicates statistical significance at the .05 level and

\*\* at the .01 level. All tests are one-tailed except those for firm size and vertical integration, which are two-tailed.

ardized differences, as estimated by Wilmore (1984). These values refer to 301 pairs of companies, belonging to 82 four-digit industries in the classification used by the Secretary of Federal Revenue for 1978.

Although the multinational and domestic companies are (in construction) comparable in terms of sales, they differ significantly when other conventional measures of size are used: the multinational companies are, on average, 6% bigger than the domestic companies in terms of value added, but 13% smaller in number of employees.

The multinational companies operate bigger establishments than their local counterparts, which suggests that they tend to reproduce here the scale pattern to which they are used in their countries of origin.

The fact that companies with similar sales volumes show quite different value added figures shows that, in general, the multinational companies are more vertically integrated than the corresponding domestic ones, i.e., they tend to follow internally a larger number of steps in the productive process.

The multinational companies spend more on advertising and remit more abroad (in the form of royalties and technical assistance), than the domestic ones. This is due to the fact that those companies have advantages in the local markets which derive mostly from their ownership of trademarks and technology (patents). It was found, however, that royalty payments made by foreign companies only exceeded payments made by domestic companies in the case of joint ventures with a minority foreign holding. The reason for this, as it was seen in Section 4, is that Brazilian law prohibits this kind of remittance when the foreign investor controls the domestic payor.

The results show that the multinational companies export a higher share of their production than the domestic compa-

nies. Approximately two-thirds of the multinational companies recorded some exportation, while more than half the domestic ones did not export in 1978. The greater tendency to export displayed by the multinational companies may be connected with their easier access to information about markets and use of the company's trade channels abroad.

The results also show that the multinational companies present much higher labour productivity levels than those of their local counterparts: the difference is 28% when productivity is measured by the ratio value added/number of employees in production and 19% when it is value added/total employees. A great many of these differences can be explained by the greater (relative) absorption of skilled employees and the larger use of physical capital (machines and equipment) per employee. As a consequence, the multinational companies pay higher salaries on the average. These results may merely reflect the use (moreover, expected) of more intensive techniques in capital and skilled labour, compatible with the relative proportion of factors existing in their home countries.

Finally, multinational companies proved to be more capital-intensive, according to the three measures employed.

## 6 - CONCLUDING REMARKS

Foreign investment has played a prominent role in the Brazilian economy's recent development. This role as well as the actual nature of foreign investment has gone through deep changes in the different phases of this process. The ambiguities and contradictions that characterize it in other LDC's have also been present in Brazil causing many observers to conclude that the result is a negative impact on the Brazilian economy.

Foreign participation took the form of undertakings wholly controlled by foreign companies - above all in the period prior to the First World War, in which these companies were basi-

cally "service workers" -; the selling of technology by means of licensing trade marks and patents; and joint ventures with Brazilian companies - private and/or state. The most recent version of these joint ventures, combining the three types of agents (the "tripartite" model), after an initial success in the establishment of the chemical industry, evolved to be accepted as the government's development strategy for certain sectors. Experience has shown, however that its success depend on the convergence of very restrictive factors; even in the petrochemical industry, the model started to show clear signs of regression.

Brazilian policy regarding foreign capital cannot be considered one of the most restrictive ones, even compared to the standards of less developed countries. Moreover, Brazilian legislation as regards this subject has shown remarkable stability for over 20 years.

However, the magnitude of the country's present foreign debt is posing new questions as to the official position regarding foreign investments. Reflecting a rather generalized tendency,<sup>33</sup> the multinational companies with subsidiaries in Brazil have increasingly started to transfer resources in the form of loans substituting the capital equity.<sup>34</sup>

Governments have been encouraged to convert the foreign companies' debt into equity shares in order to lighten the debt burden.<sup>35</sup> The main argument underlying this proposal is the discriminating treatment that present tax laws give to profits compared with interest payments, for the latter can be deducted as cost in calculations of tax able income.

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<sup>33</sup>See World Bank (1982), pp. 51-52.

<sup>34</sup>In June 1979, it was estimated that 16% of the country's total debt referred to debts incurred by the companies with foreign participation.

<sup>35</sup>The Decree-Law 1958 of December 12<sup>th</sup>, 1977 granted fiscal incentives to this conversion, which, however, have not produced the expected effects.

Notwithstanding the seriousness of the debt problem and the important role to Brazilian economic growth that foreign investment will continue to play, there are some doubts regarding not only the convenience but also the effectiveness of a more liberal treatment of foreign capital.

The first aspect has to do with the political exploitation of a change in the treatment of foreign capital in Brazil and with the increasing risk perceived by investors, that would result from a instability in the rules.

With respect to efficiency, one must bear in mind, first of all that the capital flows are also treated by the fiscal legislation of the other countries as well as the existence of double taxation agreements.

Second, the preference shown by multinational companies for loan capital seems to be based largely on non-fiscal factors. And this is so for two main reasons: the first is that a contractual loan gives an income flow that does not depend on operational performance of the subsidiary, which is especially convenient in recessive periods. The second reason is that profit remittances and capital repatriation are subjected to greater governmental control than are loans and interest payments. It is assumed that the second possibility would amount to a declaration of moratorium and, as a consequence, a confrontation with the world finance community.

In spite of this, there are some technical aspects which could be improved in the regulation of foreign capital. They could be made in such a way that they would be compatible with these considerations.

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